

CLAIMS

What is claimed is:

1. A method of evaluating the performance of a web site by measuring site performance through the use of probing computers accessing the site, said method comprising:
providing executable probing instructions to a probing computer, said probing instructions causing the computer to measure the time to download a specified Web page and report the measurement data to a processing computer.
2. The method of claim 1 wherein the step of providing the probing instructions to the probing computer includes embedding the probing software in the HTML of the Web page.
3. The method of claim 2 wherein the probing software is an additional attribute to one tag of the specified Web page HTML.
4. The method of claim 2 wherein the probing instructions include a first bit of interpretive probing script that starts a timer, a second bit of interpreting probing script that stops the timer after all of the Web site HTML and embedded objects are downloaded by the probing computer and calculates the length of time to download the page, and a third bit of interpreted probing script that causes the client computer to report the measured time interval to a processing computer.

5. The method of claim 4 wherein the third bit of interpreted probing script is further configured to report available client characteristics of the probing client computer to the processing computer.

6. The method of claim 1 wherein the reported data is tagged with an identifier for the specified Web page.

7. The method of claim 1 wherein the step of providing the probing instructions to the probing computer includes communicating probing software from a central server to the client computer.

8. The method of claim 1 further including the steps of analyzing the measurement data and communicating display data to a display engine for user display in graphical form.

11. The method of claim 10 wherein the central server includes a data structure corresponding to each client characteristics, a processor for selecting a work packet for each client computer, and a communication module for communicating with the plurality of distributed client computers including to receive performance measurement data from the client computers and to send work packets to the client computers, each of said data structures including a work set identifier corresponding to each of the plurality of work sets, a listing of each client characteristic, and a time entry representing the last time that each work set was probed by a client computer having each client characteristic, and wherein the method further includes the steps of determining the characteristics of the client computer communicating the request for work and wherein the step of selecting the work packet for the client computer includes identifying each of the plurality of work sets having the client characteristics of the client computer requesting work, determining the time entry in each data table field corresponding to each of the identified work sets and the characteristic of the client computer requesting work, determining the current time, subtracting each time entry from the current time, calculating the product of differences, and selecting the work set having the largest product.

12. The method of claim 11 further including repeating the step of selecting one of the identified work sets if the client computer requests a work package having more than one work set.

13. The method of claim 9 further including the step of the central server storing the performance measurement data received from the client computers in a performance database.

14. The method of claim 13 wherein said central server further includes a data analysis user interface, a data display engine, a data analysis engine communicating with the performance database and the data display engine, and a data analysis user interface communicating with said data and analysis engine for receiving a data display and displaying the data display to a user, and further including the steps of selecting analysis options using the data analysis user interface, generating a data display through the data display engine, and displaying the data display to the user through the data analysis user interface.

15. The method of claim 9 further including the step of communicating probing software to the client computer, the probing software including an executable program that causes the client computer to download a predetermined Web page and configuration commands to prioritize the running of the probing software on the client computer relative to other processes.

16. A system for probing a Web site, comprising:

a distributed network of client computers having client characteristics including a geography, an operating system type, and a connection type, said client computers each including probing software causing the client computers to download a web site after receiving a work packet identifying a web site and to record performance measurement data representative of web site performance; and

a central server for controlling the probing performed by the distributed client computers, said central server including

a data structure corresponding to each client characteristic, each of said data structures including a work set identifier corresponding to each of a plurality of work sets, a listing of each client characteristic, and a time entry representing the last time that each work set was probed by a client computer having each client characteristic,

a processor for selecting a work packet for each client computer, and

a communication module for communicating with said distributed network of client computers including to receive performance measurement data from said client computers and to send said work packets to said client computers.

17. The system of claim 16 wherein said processor selects a work packet in response to receiving a work request by a specified client computer and wherein the selection of a work packing includes identifying each of the plurality of work sets having the client characteristics of the specified client computer, determining the time entry in each data table field corresponding to each of the identified work sets and the characteristics of the specified client computer, determining the current time, subtracting each time entry from the current time, calculating the product of the differences, and selecting the work set having the largest product.

18. The system of claim 17 wherein said central server further includes a performance database for storing performance measurement data received from each client computer, a data analysis user interface for selecting analysis options, a data display engine for generating a data display, a data analysis engine communicating with the performance database and the data display engine, and a data analysis user interface communicating with said data analysis engine for receiving a data display and displaying said data display to a user.